

Tour - Mechanicville Hydroelectric Plant

Restored Turbines designed by Charles Proteus Steinmetz

**Speaker/Tour Guide: Jim Besho, CEO
Albany Engineering Corporation**

Date: Saturday, September 27th

Time: 10 AM or Noon
(Two identical tours will be given.)

Place: 951 Hudson River Road (Overlapping
Routes 4 and 32), Mechanicville, NY 12118
(south of Jack Byrne Ford dealership).

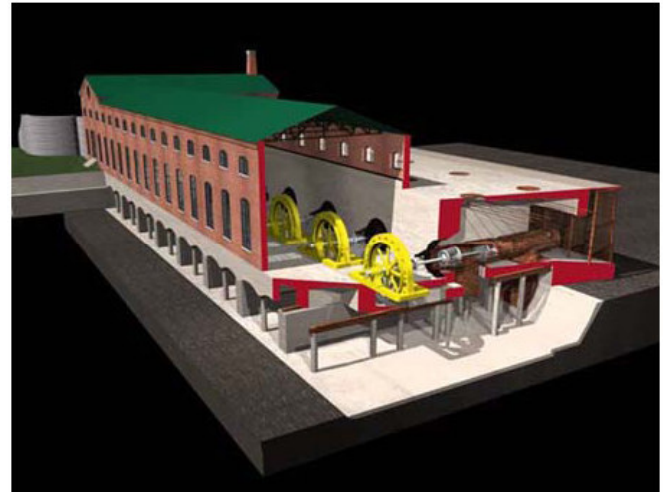
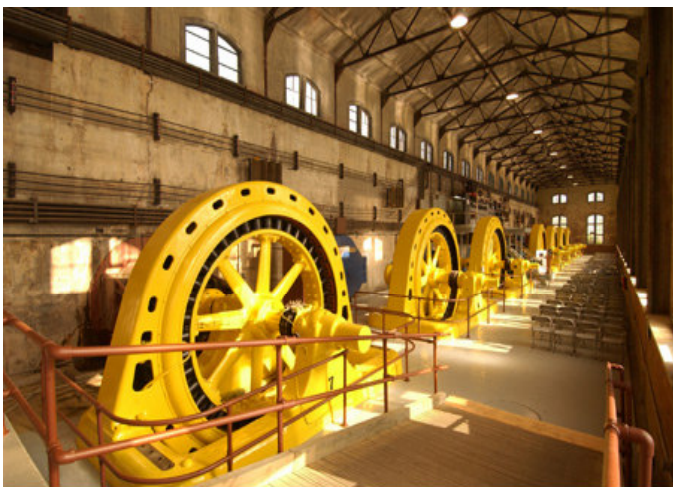
RSVP by Noon September 25th (Thursday).

Contact either:

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Abstract:



The Mechanicville Hydroelectric Plant is an active power-producing facility, harnessing the energy of the Hudson River between Saratoga and Troy. It was originally built in 1897, and is the oldest, continuously-operating facility of its kind in the United States. The majority of the original turbines have been restored during the past 5 years by Jim Besho's team at Albany Engineering Corporation. Jim, CEO of Albany Engineering, is a professional engineer with more than 35 years of hydroelectric experience. Albany Engineering was founded in 1924 and has designed, rehabilitated, and commissioned more than 125 MW of hydroelectric facilities in 11 states and 4 foreign countries.

The turbines were designed by world-renowned German-American mathematician and electrical engineer, Charles Steinmetz, who was a pioneer in applying mathematical theory related to complex numbers to electrical motor design while working for General Electric. Steinmetz was also a part-time professor at Union College from 1902 to 1923, while working for GE in Schenectady, and also served as president of both the Schenectady Board of Education and the Schenectady City Council.

The event will start with a talk discussing the plant's history and operation, followed by a walking tour of the plant. The tour covers both the inside and outside of the plant. Please dress appropriately for the weather. The plant is not heated.

Participants are required to sign a Release and Waiver of Liability Form (posted on the H_M section web site) prior to taking tour, and for safety reasons, must be 16 years of age or older.

**THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
HUDSON MOHAWK SECTION
PO BOX 206
Schenectady, NY 12301**

Directions:

From Northway (I-87) Exit 9-E:

Merge onto Clifton Park Boulevard/Route-146 Eastward toward Halfmoon. Continue to follow Route-146E for 0.2 miles. Turn right to stay on CR-86/Upper Newtown Road for 1.9 miles. Turn left at Hudson River Road/Mechanicville Road/Overlapping Route 32 and US Route 4 for 0.6 miles.

From Hoosick Falls/Bennington, VT area:

Get onto NY Route 7 heading westward. Turn right at Cooksboro Road/CR-126, follow for 1.7 miles. Take a slight left at CR-128/Plank Road, proceed 3.7 miles. Take a slight right at Northern Drive/Rout-142, continue to follow Route-142 for 1.0 mile. Continue on 125th Street/CR-124 for 0.2 miles. Turn right at 2nd Avenue/US-Route 4, proceed 472 feet. Turn left at 126th Street/US-Route 4, continue to follow US-Route 4 for 0.4 miles. Turn right at 3rd Street/Route-32/US-Route 4, continue to follow Route-32/US-Route 4 for 5.9 miles.

Distribution of Section Newsletter

The Hudson Mohawk newsletter is posted at:

<http://sections.asme.org/hudson-mohawk/>

Once each newsletter is posted on the Section's web page, an e-mail notification and link to the above website is sent to members who have e-mail addresses in the ASME member database. If you are an active member of ASME and did not receive an e-mail notification, please go to the ASME web site and update your membership information. <http://members.asme.org/myasme/login/myasme.cfm>

Message from the Section Chair

I am excited to take on the role as chair of the Hudson-Mohawk Section. Fred Willett did a terrific job leading the section for the past five years. Fred will remain active in the section, but has decided to devote his limited spare time to other interests.

Fred's most notable accomplishment was recruiting and retaining volunteers who make this section run. Through the

help of a number of people we, as a section, have participated in more events and activities than we did a few years ago.

Three years ago, ASME initiated merit based funding for local sections. Over the past three years our score, or grade, has increased each year. Ultimately, these higher scores result in more funding from ASME to take on new programs.

Starting with the 2007-2008 program year ASME renewal form offered the option of making monetary donations directly to the local section. I am pleased to report that section members donated \$600 to the Hudson-Mohawk section.

A new initiative that I hope to undertake this year is providing grant money to science and technology programs to local school districts. The Boston section started a similar program last year and found it extremely successful. Grants are awarded to local school districts to purchase equipment or supplies for experiments or class projects. While these grants are modest (~\$200-\$250) they enable teachers to carryout class projects they did not have money for in their budgets.

This month's tour is a replacement for a behind the scenes "hard hat" tour of the destroyer escort USS Slater. Due to insurance concerns, the USS Slater cannot conduct those tours at this time. We will try to reschedule an "enhanced" tour of the USS Slater in the future. Meanwhile, the tour of the Mechanicville Hydroelectric plant is an exceptional tour. I am glad that Albany Engineering is able to accommodate us.

David Smith

Chair - Hudson-Mohawk Section
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